

IN THE SPECIFICATION

Please amend the Abstract as follows. A clean version of the amended Abstract is provided at page 18.

--A flared end structure [[24]] formed by processing an end part of a metal tube [[20]] which is pressed against a seat [[25]] formed in a member [[21]] by tightening a coupling nut [[27]] to the member [[21]]. The flared end structure [[24]] has a joining end part [[30]] to be pressed against the seat [[25]] of the member [[21]], and a curved part [[32]] continuous with the joining end part [[30]]. The curved part [[32]] has an outer surface [[31]] having a curved area, and a concave inner surface [[34]] having a bottom edge [[34a]]. The curved area of the outer surface [[31]] has a radius R of curvature smaller than the wall thickness t of the metal tube [[20]].--

Please amend the paragraph at page 1, line 34, to page 2, line 9, as follows:

--~~Since the~~ The flared end structure 12 of the prior art flared type pipe joint is elastically deformed to make the flared end structure 12 come into close contact with the seat 13 by its resilience. Therefore, if the coupling nut 15 is screwed excessively on the externally threaded end of the nipple 11, the area of contact between the flared end structure 12 and the seat 13 increases and, consequently, contact pressured decreases and the sealing effect of the flared type pipe joint decreases. Thus, the sealing ability of the prior art flared type pipe joint is dependent on the degree of tightening the coupling nut 15 and the sealing effect of the prior art flared type pipe joint is insufficient for high-pressure piping.--

Please amend the paragraph at page 5, line 25, to page 7, line 5, as follows:

--Referring to Fig. 2 showing the flared end structure 24 in an enlarged diagrammatic view, the flared end structure 24 has a joining end part 30 to be pressed against the seat 25 of the body 21 of the hydraulic cylinder, and a curved part 32 continuous with the joining end part 30. The curved part 32 has an outer surface 31 and a concave inner surface 34 having a bottom edge 34a. The outer surface 31 has a flat area continuous with the joining end part 30 and a curved area continuous with the flat area. The curved area of the outer surface 31 of the curved part 32 of the flared end structure 24 has a radius R of curvature smaller than the wall thickness t of the tube 20. The curved area of the outer surface 31 has a center P of curvature at a position on the radially outer side of the bottom edge 34a with respect to the axis m of the tube 20. An end surface of the coupling nut 27 comes into contact with a flat surface 33 of a neck part behind the curved part 32 as shown in Fig. 1. The flat surface 33 is perpendicular to the axis m of the tube 20. A curved connecting surface having a radius r of curvature extends from the flat surface 33 and merges into the outer surface of the tube 20. Thus the curved connecting surface having the radius r extends between the inner edge of the flat surface 33 and the outer surface of the tube 20. The center of curvature of the curved connecting surface is at a position radially outside the tube 20. The flat surface 33 is contained in a plane extending between the curved area having a radius R of curvature of the outer surface 31 and the curved connecting surface having the radius r of curvature. The flat surface 33 has a radially outer edge connecting with the curved area having a radius R of curvature of the outer surface 31 and a radially inner edge connecting with the radially outer edge of the curved connecting surface having the radius r of curvature. The flat surface 33 does not necessarily need to connect with both the curved area having a radius R of curvature of the outer surface 31 and the curved connecting surface having the radius r of curvature.

However, the shape of the flared end structure 24 can be explicitly described when the flat surface 33 connects with both the curved area having a radius R of curvature of the outer surface 31 and the curved connecting surface having the radius r of curvature. The flat surface 33 of the neck part does not need to be precisely perpendicular to the axis m of the tube 20. When the flat surface 33 is substantially perpendicular to the axis m of the tube 20, the coupling nut 27 advancing axially toward the flat surface 33 is able to exert a pressure efficiently on the flat surface 33 of the neck part. As mentioned above, the radius R of curvature of the curved area of the outer surface 31 is smaller than the wall thickness t of the tube 20. Practically, the curved area having the nominal radius R of curvature of the outer surface 31 is a successive arrangement of curved areas having different radii of curvature. Thus the radius R may be considered to be the mean of the different radii of curvature, and the requirement of the present invention is satisfied when the mean of the radii of curvature is smaller than the wall thickness t .--

Please amend the paragraph at page 8, lines 11-26 as follows:

--In the flared end structure 24 having the radius R of curvature far smaller than the wall thickness t shown in Fig. 4(b), the bottom edge 34a of the concave inner surface 34 is on the radially outer side of the inner edge of the flat surface 33 of the neck part. Theoretically, this curved ~~part~~ part 32 has high rigidity and is difficult to compress. Practically, when an end part of the tube 20 is processed to form the curved part 32 in such a shape, it is possible that the curved part 32 cracks. Therefore, when the radius R of curvature is far smaller than the wall thickness t or when the center P of curvature of the curved area of the outer surface 31 is on the radially outer side of the bottom edge 34a of the concave inner surface 34 with

respect to the axis m, the present invention is effective, provided that the curved part 32 will not be crushed or cracked. Desirably, the radius R of curvature is not very small as compared with the wall thickness t.--

Please amend the paragraph at page 9, lines 25-34 as follows:

--In the flared end structure 24 shown in Fig. 3(a), $R = t$ and the outer edge of the flat surface 33 and the bottom edge 34a are contained in the same cylindrical surface. Suppose that the width of the inner circumference 30a of the joining end part 30 is A, the axial distance between the inner end of the inner circumference 30a and the bottom edge 34a is B, the radial distance between the inner circumference 30a and the bottom edge 34a is C and the inner circumference 30a of the joining end part 30 is parallel to the axis m of the tube 20.

Then,

$$L2 = A + B + t \quad \text{..... (3)--}$$